



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/078,003	02/20/2002	Nahoko Takano	Q68521	4722

EXAMINER	
ELALLAM, AHMED	

ART UNIT	PAPER NUMBER
2616	

MAIL DATE	DELIVERY MODE
12/11/2007	PAPER

7590 12/11/2007
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3213

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/078,003

Applicant(s)

TAKANO ET AL.

Examiner

AHMED ELALLAM

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-9, 12-22 and 24 is/are allowed.
- 6) ☒ Claim(s) 10, 11, and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This office action is responsive to Amendment filed on 09/28/2007. The Amendment has been entered.

Claim Rejections - 35 USC § 102

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

1. Claims 10, 11 and 23 are rejected under 35 U.S.C. 102(a) as being Anticipated by Admitted Prior Art, specification page 3, line 15-page 4, line 20. Hereinafter referred to as APA.

Regarding claims 10, 11, and 23, the APA discloses the base stations transmit pilot signals at a predetermined power, and the mobile station measures the reception quality of the pilot signals transmitted by the base stations having the links set up, so that the base stations of high reception quality is determined as transmitting base stations and any station other than the transmitting base station stops at least some of the transmission. A base station control unit for controlling the base stations having the links set up determines base station identifiers of the plurality of base stations for having the links set up respectively when the mobile station starts the soft handover. Moreover, the above base station identifiers are base station unique information for identifying individual base stations. In the base station control unit, code words representing combinations of the base station identifiers are defined, and the base stations and the mobile station have such information. The mobile station transmits the code word representing the combination of the base station identifiers of the base stations

determined as the transmitting base stations to the base stations having the links set up. The base station having the link set up judges which defined code words the received code word is, and judges from a table indicating correspondence between the code words and the base station identifiers whether the base station identifier of the base station is included. Consequently, the base station judges itself to be the transmitting base station, in the case where the base station identifier of the station is included. Then, the base station performs the transmission by the downlink. On the other hand, in the case where the base station identifier of the base station is not included, the station stops the transmission. Thus, it is possible to have the transmission performed only by the base stations of little propagation loss, so that the interference with the downlink decreases and the link capacity is expected to increase.

Allowable Subject Matter

2. Claims 1-9, 12-22, and 24 are allowed.

Response to Arguments

3. Applicant's arguments filed 09/28/2007 have been fully considered but they are not persuasive.

Applicants argue that no portion of the APA discloses: (1) a link set-up base station number; or (2) means for notifying each based station of such a link set-up base station number. And that no portion of the APA discloses: (1) a link set-up base station number; or (2) means for notifying each based station of such a link set-up base station

number. And no portion of the APA discloses that any such number is notified to other base stations using the base station control unit.

Examiner respectfully disagrees, the APA relied upon discloses (specification, page 3, line 15 through page 4, line 20) :

In this journal, the base stations transmit pilot signals at a predetermined power, and the mobile station measures the reception quality of the pilot signals transmitted by the base stations having the links set up, so that the base stations of high reception quality is determined as transmitting base stations and any station other than the transmitting base station stops at least some of the transmission. A base station control unit for controlling the base stations having the links set up determines base station identifiers of the plurality of base stations for having the links set up respectively when the mobile station starts the soft handover. Moreover, the above base station identifiers are base station unique information for identifying individual base stations. In the base station control unit, code words representing combinations of the base station identifiers are defined, and the base stations and the mobile station have such information. The mobile station transmits the code word representing the combination of the base station identifiers of the base stations determined as the transmitting base stations to the base stations having the links set up. The base station having the link set up judges which defined code words the received code word is, and judges from a table indicating correspondence between the code words and the base station identifiers whether the base station identifier of the base station is

included. Consequently, the base station judges itself to be the transmitting base station, in the case where the base station identifier of the station is included. Then, the base station performs the transmission by the downlink. On the other hand, in the case where the base station identifier of the base station is not included, the station stops the transmission. Thus, it is possible to have the transmission performed only by the base stations of little propagation loss, so that the interference with the downlink decreases and the link capacity is expected to increase.

It is clear from the above passage of APA in which the mobile station transmits the code word representing the combination of the base station identifiers of the base stations determined as the transmitting base stations to the base stations having the links set up reads on the disputed limitation, because the combination of base station identifiers implicitly provide for the number of base stations having the link set up among the total number of the base stations, based on the reception quality of the pilot signals transmitted by the base stations. The APA further discloses a **base station control unit for controlling the base stations having the links set up determines base station identifiers of the plurality of base stations for having the links set up respectively when the mobile station starts the soft handover.** It is noted that the code words having the respective base station identifiers is transmitted to each base station is under the control of the base station control unit, which reads on the claimed limitation 2).

Claim 11, and 23:

Regarding claims 11 and 23, Applicants argue that *the APA fails to disclose, at least, "base stations having radio links set up with said mobile station and a base station control unit assigning base station identifiers to said base stations in a predetermined order, wherein said base station control unit has first means for notifying each base station of the base station identifiers assigned to said base stations."* Emphasis added.

Examine respectfully disagrees, first as noted in the previous action, the limitation of "assigning base station identifiers to base stations in predetermined order" has not been given patentable weight because the recitation occurs in the preamble.

Applicant did not address Examiner argument with regard to the preamble.

Nevertheless, a predetermined order of base stations identifiers assignment is within the teaching of the APA, because each base station has its own identifier that is allocated by the control unit, and given the defined code words of APA representing the combinations of the base station identifiers that are communicated to each base station having the link set up, would require a predetermined ordered identifiers within each code word. In addition, in CDMA system, it is known that base station identifiers are usually allocated by a base station controller in order to identify each base station among the base station having link set up with a mobile station (s), especially during handoff (see APA). Support for such implicit feature can be found in the cited reference to Blakeney, II et al, see for example column 3, lines 38-60, and column 4, lines 7-24.

Examiner believes, given the most broadest reasonable interpretation of the claim limitations, and the state of the related prior art at the time of the invention, that the rejection of claims 10, 11 and 23 is proper.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See Form PTO-892.
5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AHMED ELALLAM whose telephone number is (571) 272-3097. The examiner can normally be reached on 7-5:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/078,003
Art Unit: 2616

Page 8

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AHMED ELALLAM
Examiner
Art Unit 2616
12/8/07


CHI PHAM
SUPERVISORY PATENT EXAMINER
12/11/07